KINGMAN
STOCKTON HILL ROAD
CORRIDOR STUDY

PUBLIC MEETING
EVALUATION CRITERIA &
PLAN FOR IMPROVEMENTS

NOVEMBER 14, 2013

Stockton Hill Road Corridor Study

INTRODUCTION:

The City of Kingman, in cooperation with ADOT, is conducting a corridor study to identify and address the transportation needs of the Stockton Hill Road Corridor.

STUDY PURPOSE

- Develop a vision to create a vibrant and safe multimodal commercial corridor
- Conduct a comprehensive evaluation of the Stockton Hill Corridor:
  - Seek input on corridor issues and potential solutions
  - Identify development opportunities and constraints
- Develop a strategy for improvements to address current and future transportation needs in the short-term (2015), mid-term (2020), and long-term (2030)

Working Paper 1 – Current and Future Conditions

Working Paper 2 – Evaluation Criteria and Plan for Improvements

Recommended Strategy:
- *Mobility Approaches*
- *Development Framework Approaches*

WHO'S INVOLVED?

- Planning Assistance for Rural Areas (PARA)
  - City of Kingman (Sponsor Agency)
  - Arizona Department of Transportation (ADOT) (Facilitator)
  - Technical Advisory Committee Members
    - Mohave County
    - Western Arizona Council of Governments (WACOG)
    - ADOT – Kingman District Office
    - ADOT – Multimodal Planning Division
    - ADOT – Communications

PROJECT SCHEDULE

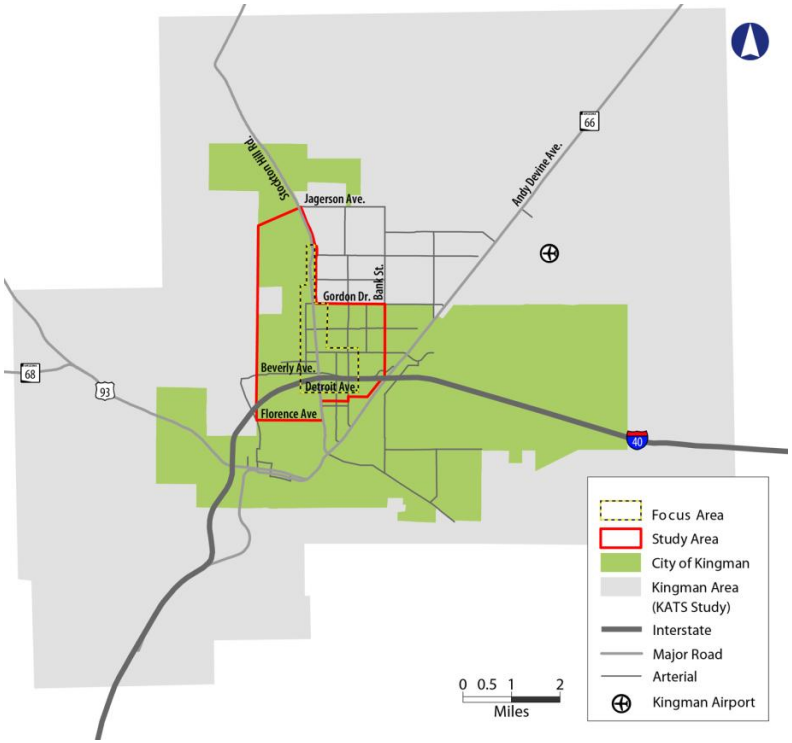
- Working Paper 1: Existing and Future Conditions
  - May 2013
- Public Open House #1
  - June 2013
- Working Paper 2: Evaluation Criteria and Plan for Improvements
  - September 2013
- Public Open House #2
  - November 2013
- Final Report
  - December 2013

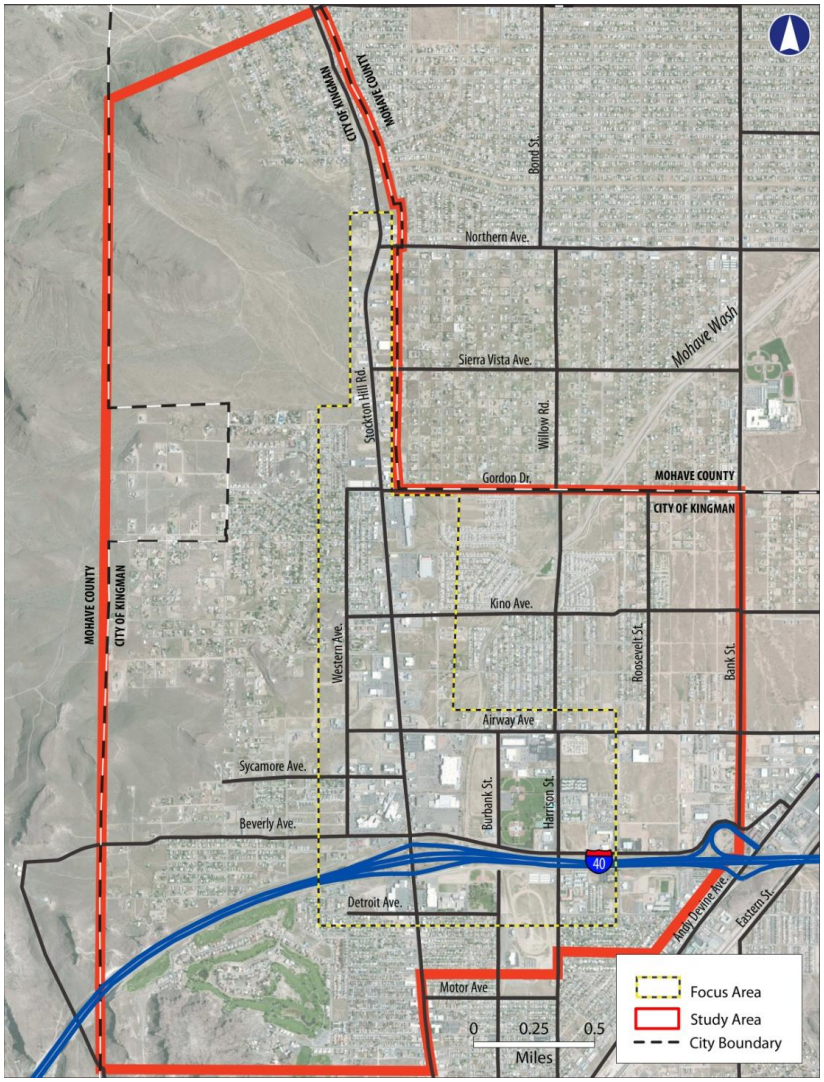
Review of Evaluation Criteria & Plan for Improvements

- Study Focus Area
- Identified Deficiencies
- Preliminary Improvements
    - Mobility Approaches
    - Development Framework Approaches
- Evaluation of Improvements
    - Screening Criteria
    - Evaluation Example
- Implementation Strategy for Recommendations
    - Near Term (5 years)
    - Mid Term (10 years)
    - Long Term (15 years)

Review of Evaluation Criteria & Plan for Improvements

Study Focus Area





Review of Evaluation Criteria & Plan for Improvements

Identified Deficiencies

- Traffic Congestion
- Non-motorized Facilities
- Beverly Avenue Intersection
- Access Management
- Land Use
- Development Policy
- Character and Urban Form
- Safety
- Circulation

Traffic Congestion

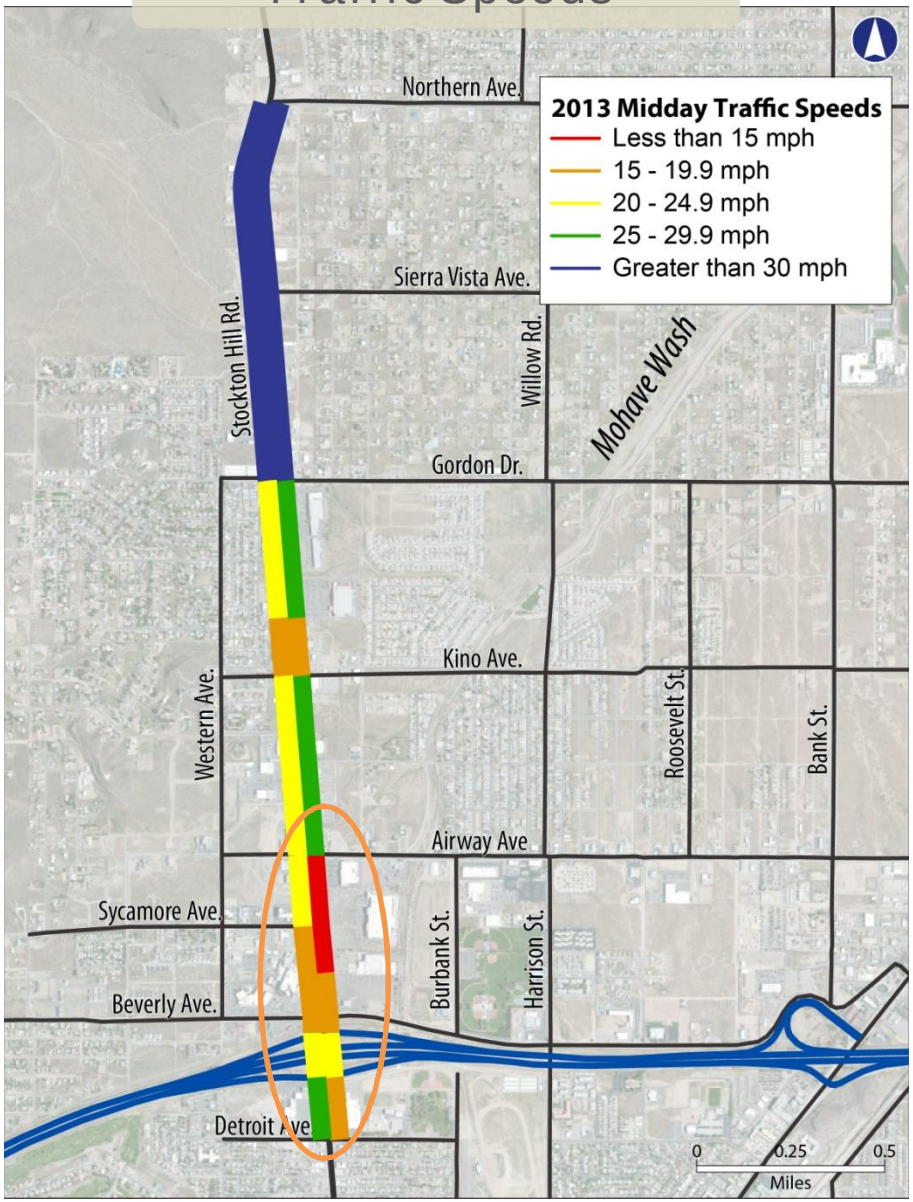
Midday Stockton Hill Road LOS

Roadway Segment on Stockton Hill Road	Northbound LOS	Southbound LOS
Detroit Ave. to I-40 EB Ramp	D	B
I-40 EB Ramp to I-40 WB Ramp	C	B
I-40 WB Ramp to KRMC	D	C
KRMC to Sycamore Ave.	D	D
Sycamore Ave. to Airway Ave.	E	C
Airway Ave. to Kino Ave.	B	C
Kino Ave. to Home Depot	C	C
Home Depot to Gordon Dr.	B	B
Gordon Dr. to Northern Ave.	A	A

*Level of Service (LOS)

Measure of congestion (A-F)
LOS A = Free Flow
LOS F = Breakdown Flow

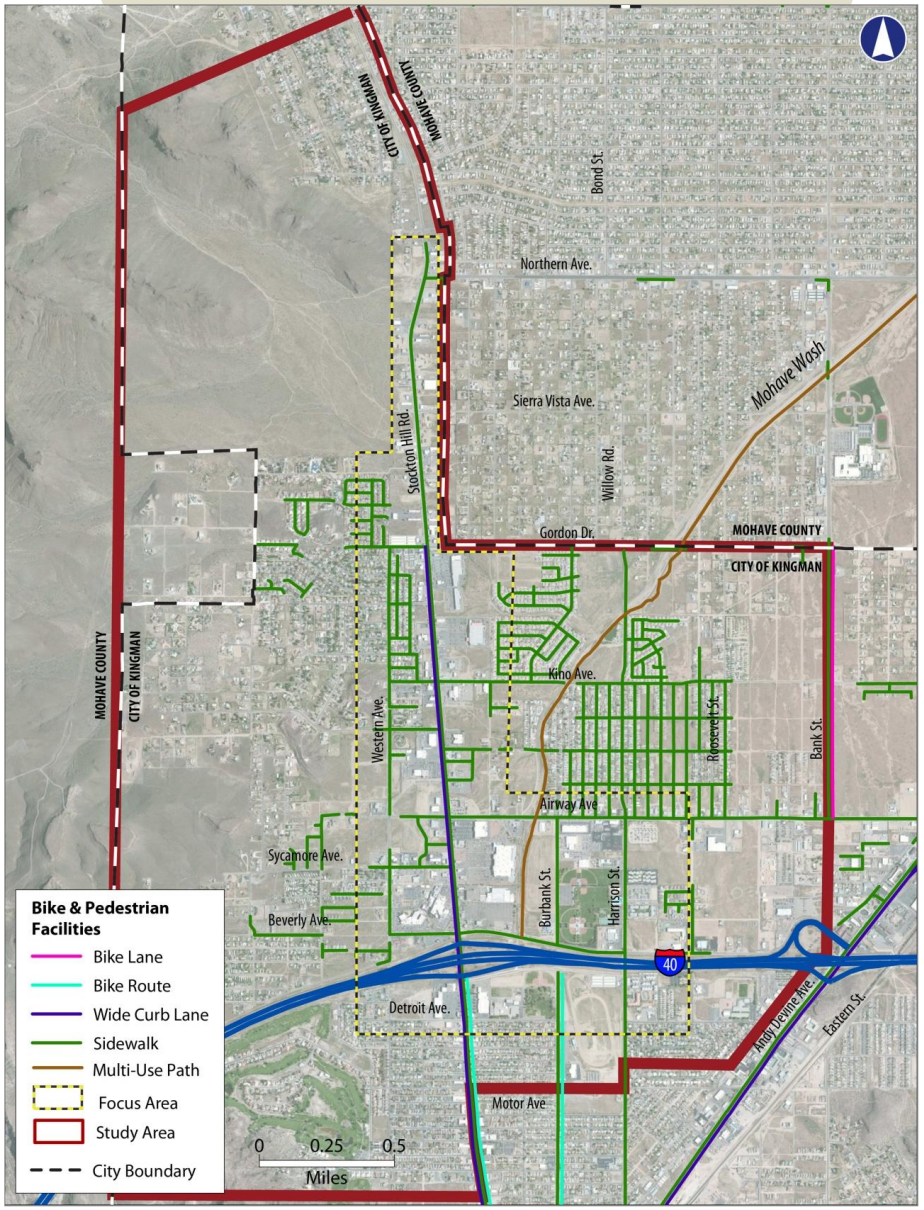
Traffic Speeds



Non-motorized Facilities

- Limited circulation network
- Disconnected pedestrian and bikeway network

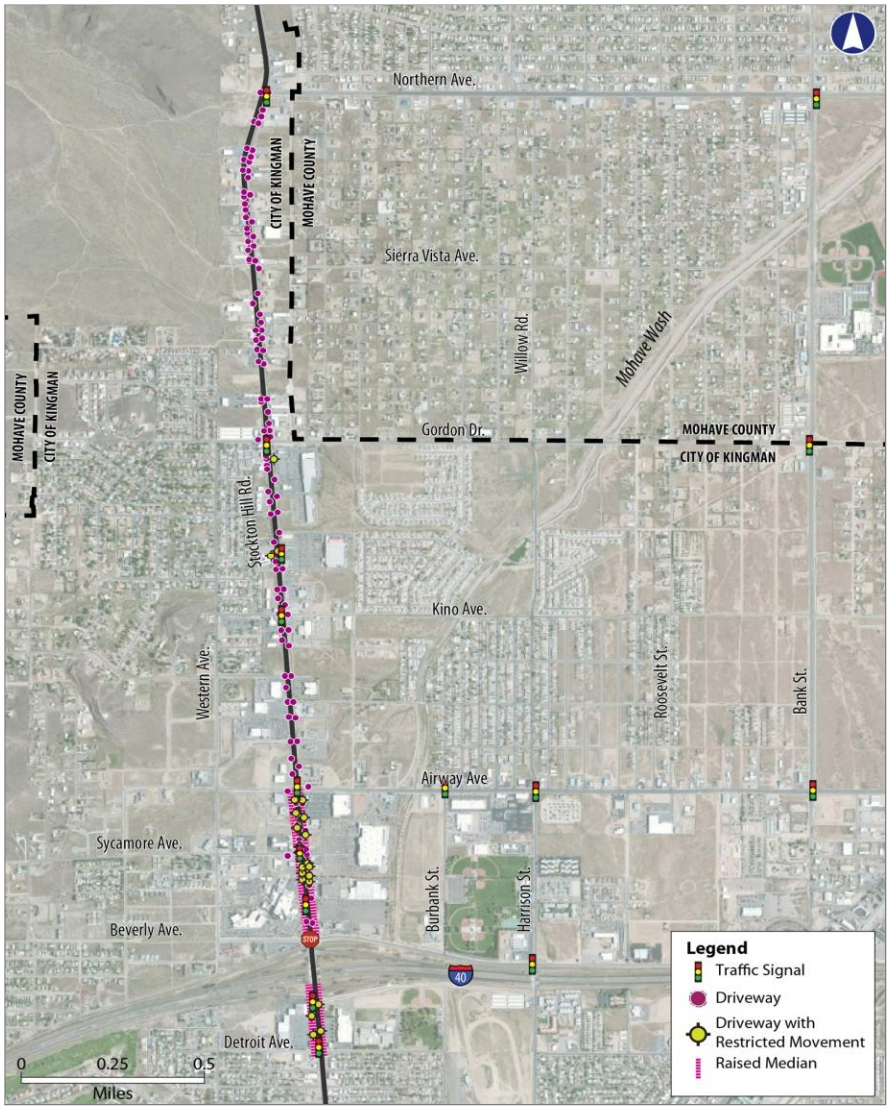
Bike & Pedestrian Facilities



Beverly Avenue Intersection

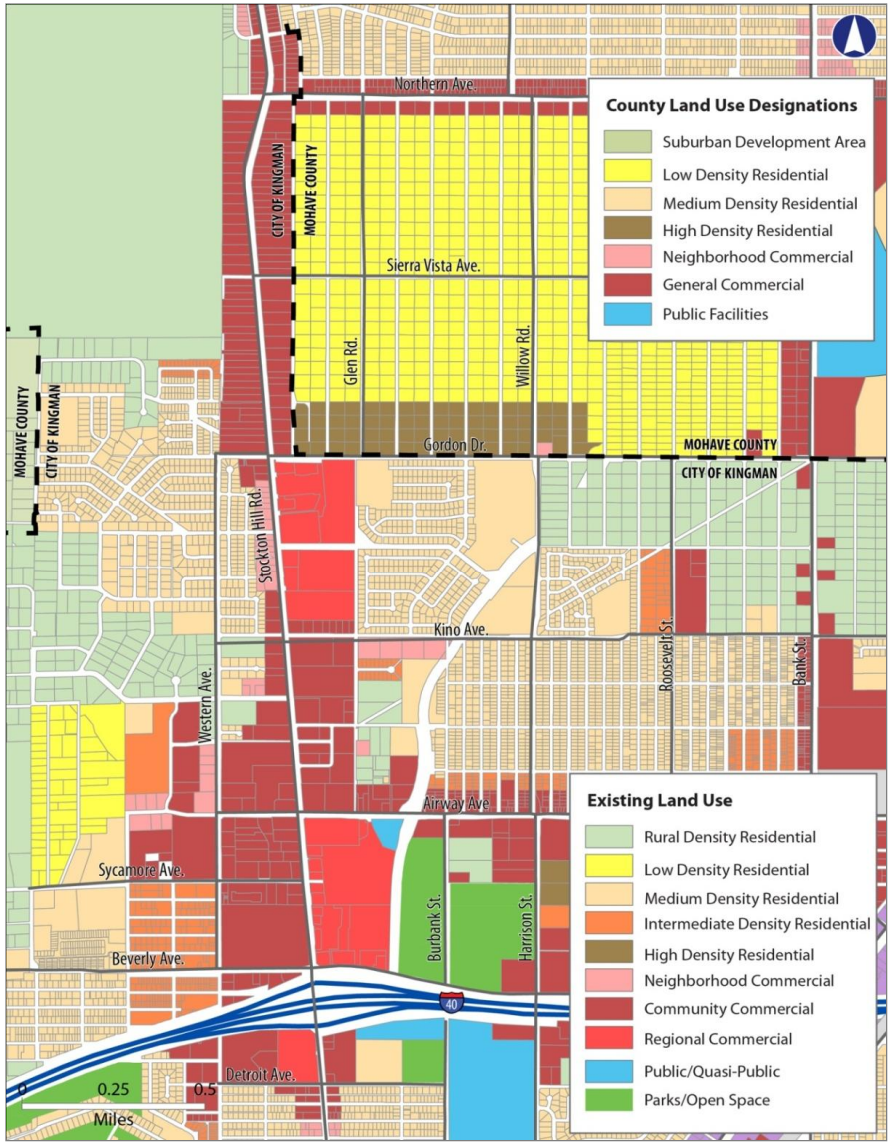
- Proximity to I-4o WB Off-Ramp
- Right turn only from EB and WB Beverly. Through and left-turns are not permitted
- Traffic cuts through across the Ross and KRMC parking lots

Access Management



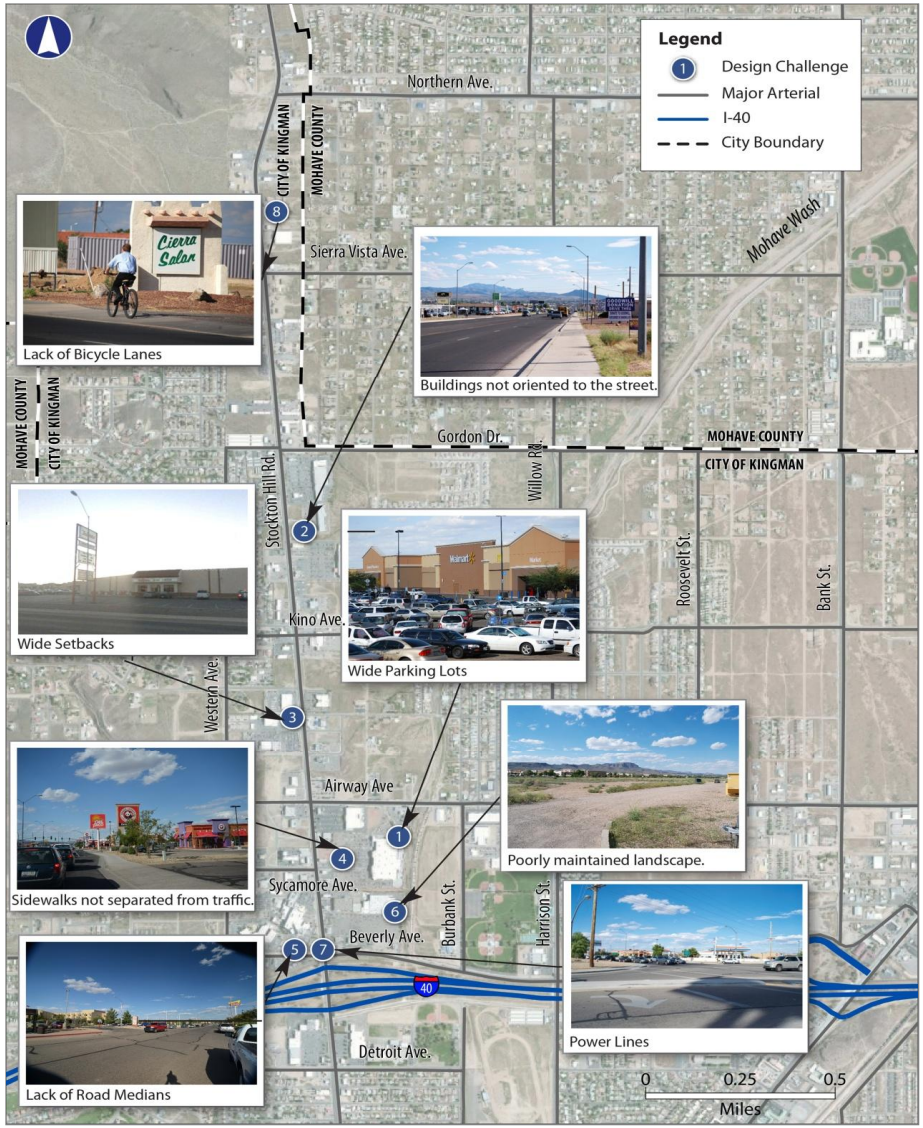
- 116 driveways along Stockton Hill Road within the study area
- Many driveways close together
- Parking lots are not connected

Land Use



- Single-purpose land uses
- Commercial strip that caters to automobiles
- Development dominated by big-box retailers
- Large undeveloped parcels

Development Policy & Character



- Development policies favor automobiles over pedestrian and bicycle safety and access
- Wide setbacks and parking lots create:
  - Limited connectivity between different transportation modes
  - Uninviting pedestrian experience

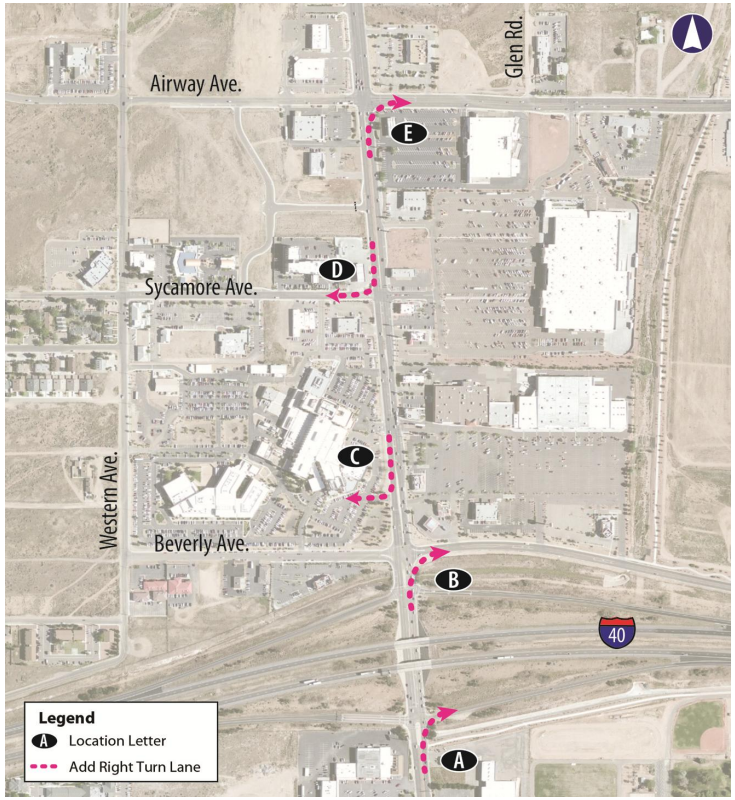
Review of Evaluation Criteria & Plan for Improvements

Preliminary Improvement Approaches

- Mobility Approaches
  - Traffic Operations
  - Access Control
  - Beverly Intersection Improvements
  - Non-motorized Improvements
- Development Framework Approaches
  - Development Policy
  - Street Network Policy
  - Multimodal Policy

Mobility Approaches
Traffic Operations

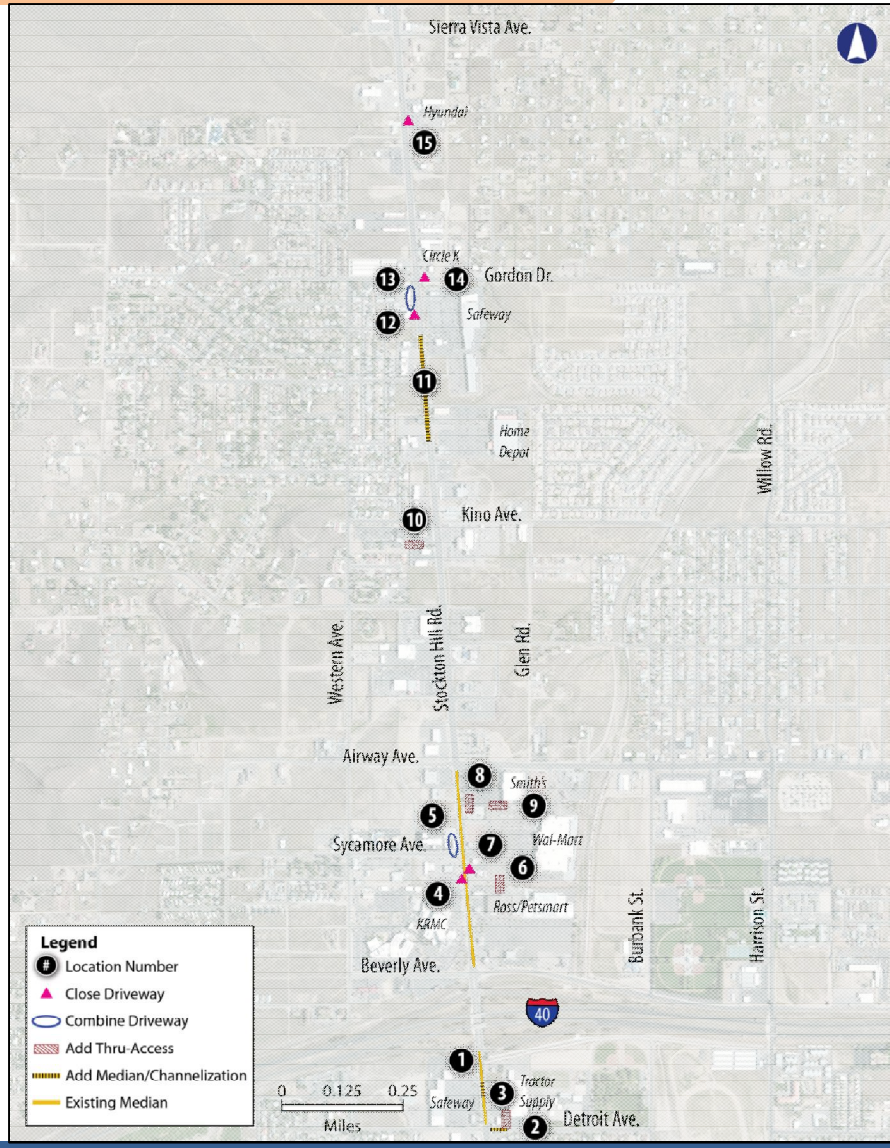
- Traffic Signal Timing and Synchronization
  - Signal “Green Time” adjusted to meet demand
  - Coordination of downstream and upstream signals
  - Continuous monitoring and adjustments
- Intelligent Transportation Systems
  - GPS Clock Receiver & Interconnect Systems
  - Interconnect System with Central Control
  - Adaptive Signal Control
- Capacity Improvements
  - Addition of right turn lanes



Mobility Approaches
Access Control

- Access Control Solutions
  - Left turn bays / channelization
  - Property thru-access connections
  - Closed driveways
  - Combined driveways
  - Raised medians

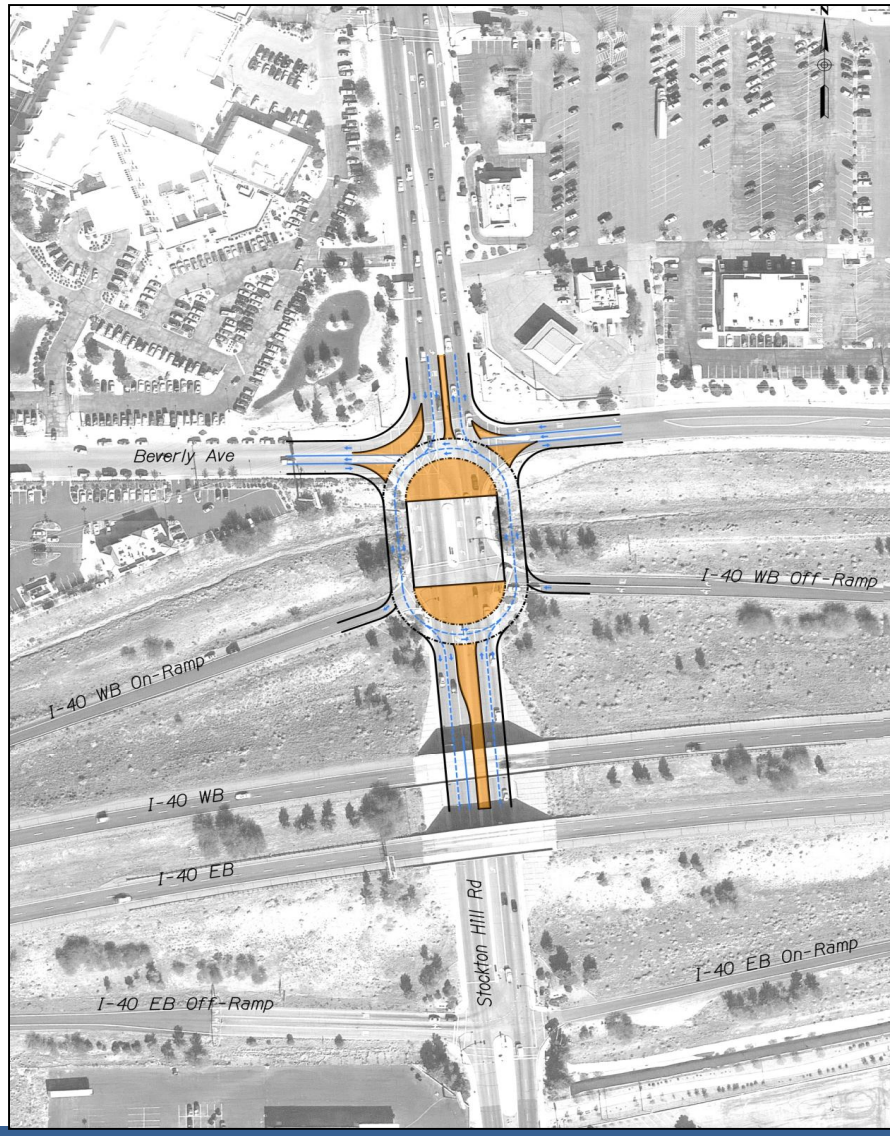
*Left turn bay
- Marked area for vehicles making a left turn
- Provides adequate space to prevent backup onto roadway



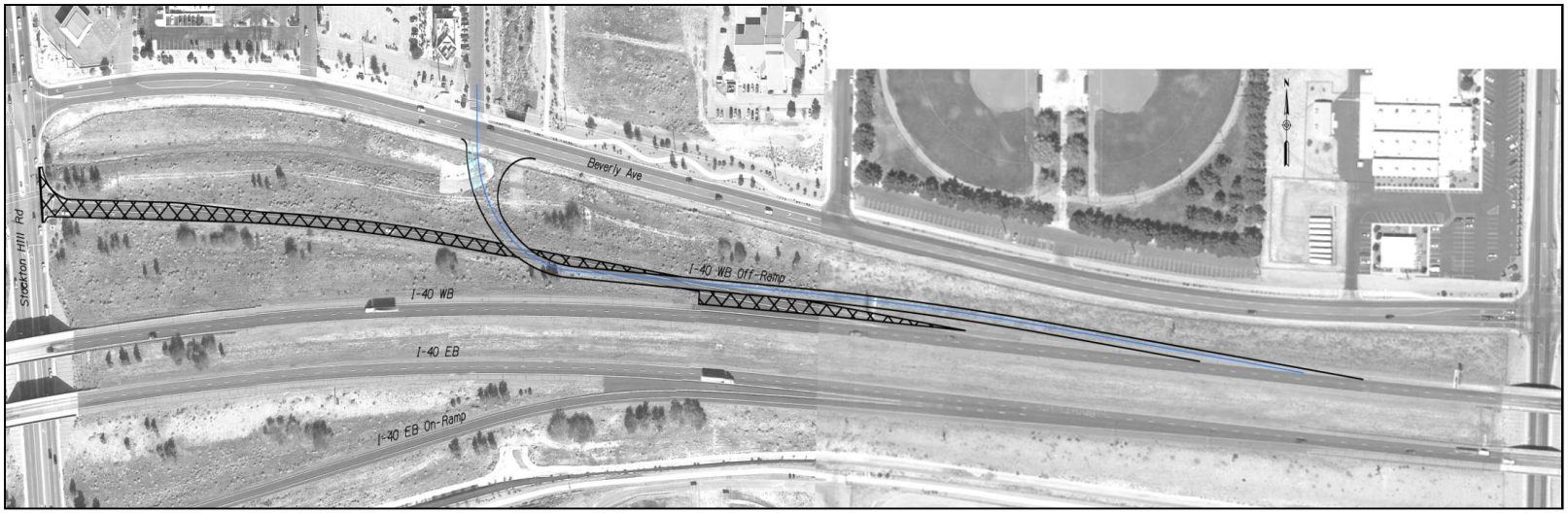
Mobility Approaches

Beverly Intersection Improvements

Elongated Roundabout

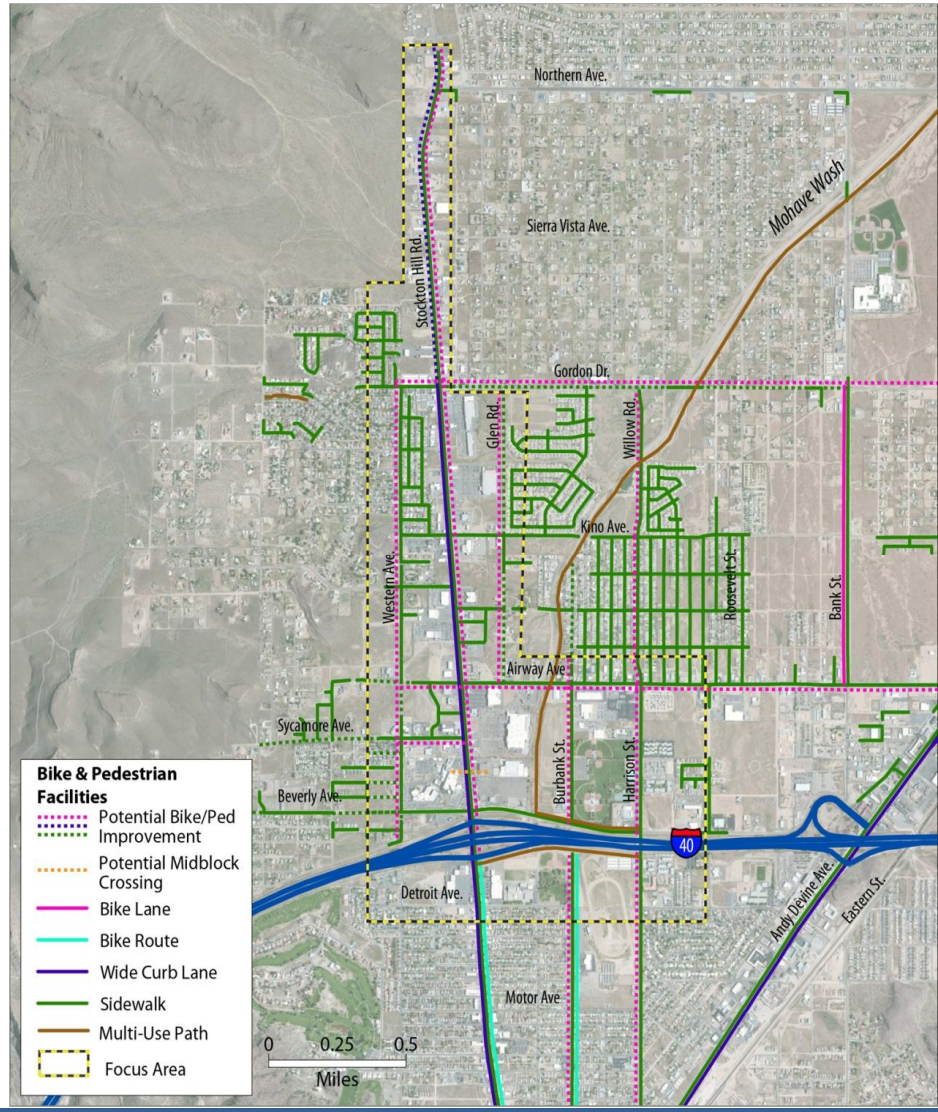


Moved Ramp Terminus (J-Hook)



Mobility Approaches
Non-motorized Improvements

- Sidewalk Improvements
- Bicycle Improvements
- Midblock Crossings



Development Framework Approaches
Development Policy

Zoning Ordinance

- Frontage and Setback Requirements
- Corner Lot Sizes
- Outparcel Access
- Overlay Zone
- Planned Development Zones

Development Review

- Optimized Driveway Location and Access Design
- Landscaped Buffers
- Combined Access and Parking

Development Framework Approaches

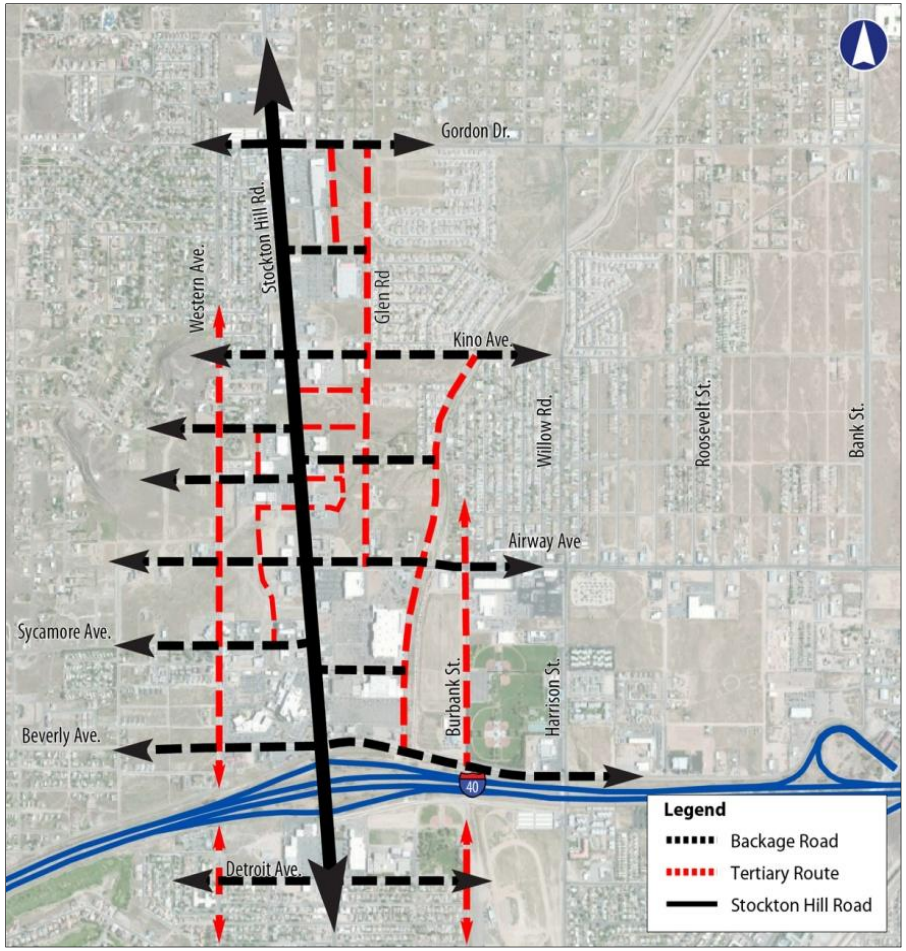
Street Network Policy

Preliminary Network Concept

- Western Ave and Glen Rd
- “Backage” Roads and Tertiary Routes

Development & Transportation

- Targeting of new developments
- Completion of street grid



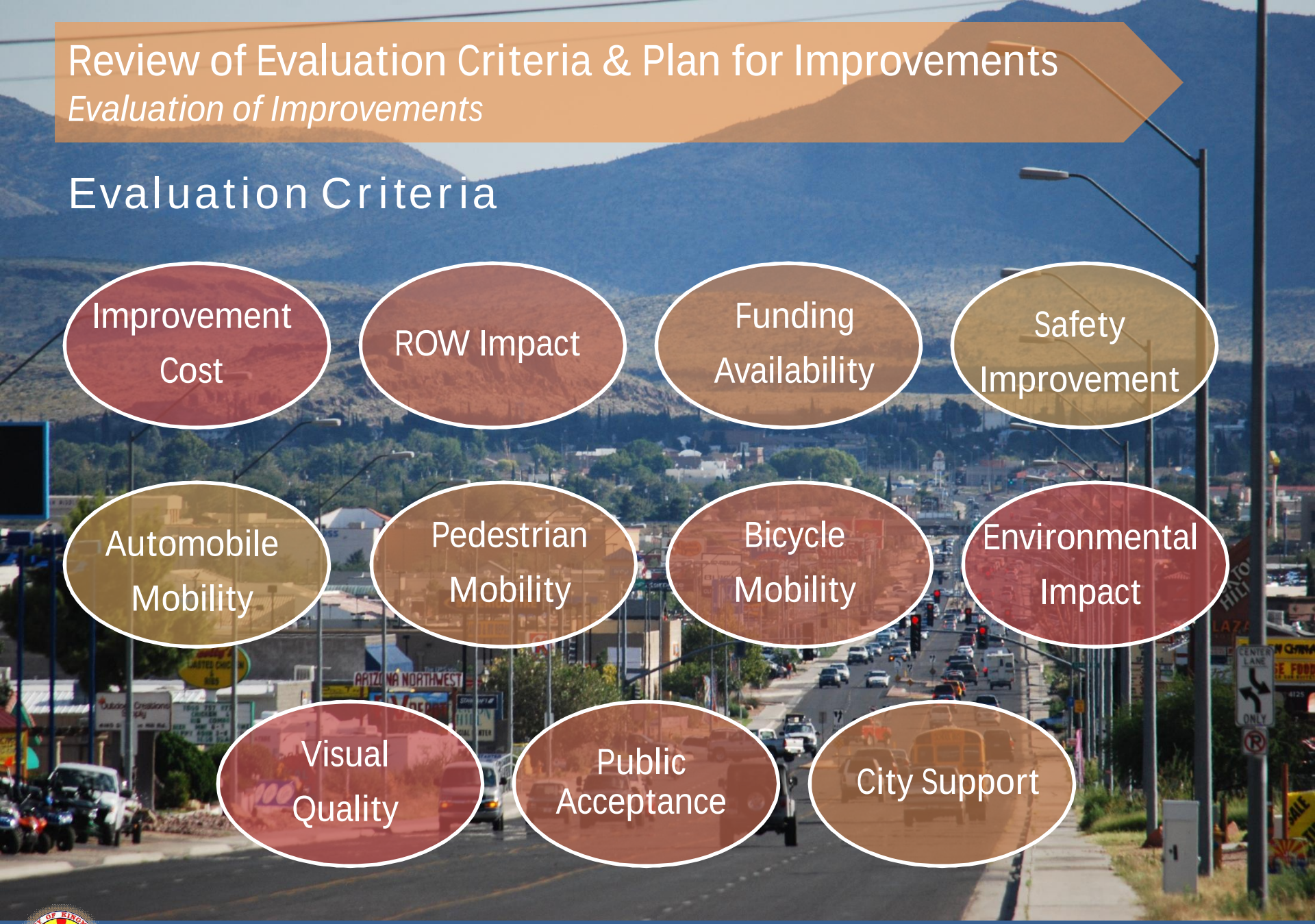
Development Framework Approaches
Multimodal Policy

- Midblock Crossing Policy
- Bicycle Parking Policy
- Sidewalk Improvement Policy
- Bicycle Lane Improvement Policy
- Transit Amenity Policy

Review of Evaluation Criteria & Plan for Improvements

Evaluation of Improvements

Evaluation Criteria



Mobility Approach Evaluation EXAMPLE

Beverly Avenue Improvements

Criteria	Elongated Roundabout	Moved Ramp Terminus
Improvement Cost	$$$	$$
ROW Impact	Poor	Fair
Funding Availability	Poor	Fair
Safety Impact	Fair	Good
Automobile Mobility	Good	Good
Pedestrian Mobility	Poor	Fair
Bicycle Mobility	Poor	Fair
Environmental Impact	Fair	Fair
Visual Quality	Fair	Fair
Public Acceptance	Fair	Fair
City Support	Good	Fair

Development Framework Approach Evaluation EXAMPLE

Development Policy – Development Review

Criteria	Optimized Access Design	Shared Access	Shared Parking	Landscape Buffers
Improvement Cost	N/A	N/A	N/A	N/A
ROW Impact	N/A	N/A	N/A	N/A
Funding Availability	N/A	N/A	N/A	N/A
Safety Impact	Good	Good	Good	Good
Automobile Mobility	Good	Good	Good	Fair
Pedestrian Mobility	Good	Good	Good	Fair
Bicycle Mobility	Good	Good	Good	Fair
Environmental Impact	N/A	N/A	N/A	N/A
Visual Quality	Good	Good	Good	Good
Public Acceptance	Good	Good	Good	Good
City Support	Fair	Fair	Fair	Fair

Review of Evaluation Criteria & Plan for Improvements

Implementation Strategy

- Recommendations
  - Improvement Projects
  - Policy Recommendations
- Prioritized over time period
  - Near Term Actions (5 years)
  - Mid Term Actions (10 years)
  - Long Term Actions (15 years)
- Separated by Category

Mobility Approach Implementation
Traffic Operations

- Near Term Actions
  - Optimize traffic signal timing
  - Install interconnect system for better coordination
- Mid Term Actions
  - Develop coordinated Intelligent Transportation System (ITS)
  - Evaluate need of capacity improvements given current conditions
- Long Term Actions
  - Develop central traffic management center
  - Maintenance and monitoring of improvements

Mobility Approach Implementation
Access Control

- Near Term Actions
  - Improve selected driveway locations (4, 6, 9, 14)
  - Improve selected thru-access locations (3, 12)
  - Improve selected median locations (1, 2, 11)
- Mid Term Actions
  - Improve selected driveway locations (7, 15)
  - Improve selected thru-access locations (5, 8, 10, 13)
- Long Term Actions
  - Maintenance and monitoring of improvements

Mobility Approach Implementation

Beverly Avenue Intersection Improvements

- Near Term Actions
  - Conduct more detailed feasibility study of Elongated Roundabout/ J-Hook
  - Identify funding sources
- Mid Term Actions
  - Design and construct final improvement
- Long Term Actions
  - Maintenance and monitoring of improvement

Mobility Approach Implementation
Non-motorized Improvements

- Near Term Actions
  - Continue with already programmed improvements
  - Plan and construct midblock crossing at KRMC
  - Evaluate upgrading wide curb lane to bicycle lane
  - Plan and construct sidewalk/ bicycle improvements on Western Ave and Glen Rd coordinated with roadway improvements
- Mid Term Actions
  - Plan and construct sidewalk improvements on Airway Ave, Sycamore Ave, Beverly Ave, and Burbank Street/ Fairgrounds Ave coordinated with roadway improvements
  - Plan and construct bicycle improvements on Burbank Street/ Fairgrounds Ave, Harrison St, Sycamore Ave, and Airway Ave coordinated with roadway improvements
- Long Term Actions
  - Maintenance and monitoring of improvements

Development Framework Approach Implementation
Development Policy

- Near Term Actions
  - Emphasize optimized driveways, landscaping, and shared facilities during development review
  - Establish maximum parking standard
  - Develop corridor policies for property frontage, setbacks, corner lot sizes, and access
- Mid Term Actions
  - Amend City Zoning Ordinance to include new standards
  - Develop shared access and parking incentive program
- Long Term Actions
  - Continually review and update development goals

Development Framework Approach Implementation
Street Network Policy

- Near Term Actions
  - Establish goals for corridor street network
  - Target types of commercial development on Western Ave and Glen Rd
- Mid Term Actions
  - Identify priority parcels in need of reassembly based on network goals
- Long Term Actions
  - Continually review and update corridor network goals
  - Plan and construct new feasible collector streets to complete street grid

Development Framework Approach Implementation
Multimodal Policy

- Near Term Actions
  - Develop corridor policies for pedestrian crossings, sidewalk improvements, bicycle lanes, and bicycle parking
- Mid Term Actions
  - Prioritize target areas for midblock crossings at problem locations
  - Establish policy to include pedestrian and bicycle improvements as part of future roadway projects in corridor
- Long Term Actions
  - Continually review and update goals

WE NEED YOUR INPUT

- Display Boards
- Beverly Avenue Intersection - Simulation
- Comment Form

- After tonight:
  - ADOT Communications Contact:

    Michele Beggs, mbeggs@azdot.gov
  - ADOT Project Manager Contact:

    Matt Carpenter, mcarpenter@azdot.gov
  - Project Website:

    www.azdot.gov/stocktonhill

OPEN HOUSE

Kingman, Stockton Hill Road Corridor Study

ADOT

PARSONS BRINCKERHOFF